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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,216	04/16/2004	Leonid Rappoport	PMR-105	1176

30869 7590 06/22/2005

LUMEN INTELLECTUAL PROPERTY SERVICES, INC.
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EXAMINER

ROBERTSON, JEFFREY

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,216

Applicant(s)

RAPPOPORT ET AL.

Examiner

Jeffrey B. Robertson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 7, 8, 10, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 20 is objected to because of the following informalities: For claim 20, under the definition of A, phthalic, isophthalic, terephthalic, and dithiopropionic are spelled incorrectly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claim 20, in the definition of A, eicosanic acid ($\text{CH}_3(\text{CH}_2)_{18}\text{CO}_2\text{H}$) is not appropriate structure since it would not result in a divalent residue, which is required in the formula A. In addition, the recitations of polythiodiacetic, polythiodipropionic, and polydithiodibutric are not supported by the specification. In lines 29-30 of page 6, applicant states that A residues may have 0-2 heteroatoms. The recitation of "poly" as a modifier indicates that more than two thio groups would be present, which is beyond what is disclosed in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7, 8, 10, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (U.S. Patent No. 5,342,724) in view of Weihe (U.S. Patent No. 2,221,418).

Wilson teaches the preparation of compositions including condensation products of disulfide containing diols and diacids to form polyesters. See col. 4, lines 10-20. In column 7, lines 3-20, Wilson teaches disulfide containing diol including bis(hydroxypropyl) disulfide.

For claims 7, 20, and 21, although Wilson does not teach bis(hydroxyethyl) disulfide, this is a homologue of the expressly taught bis(hydroxypropyl) disulfide, differing by only one $-(CH_2)-$ group between the hydroxyl and disulfide functionality. Therefore, it would be expected that these two compounds would have similar properties and it would have been obvious to one of ordinary skill in the art at the time of the invention to use bis(hydroxyethyl) disulfide as the disulfide containing diols. See *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). In addition, the Weihe reference shows the equivalency of these compounds in col. 1, lines 20-39. It is prima facie obvious to substitute equivalents, motivated by a reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343, *In re Jeze*l 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532.

For claims 7, 20, and 21, in column 5, lines 60-62, Wilson teaches diacids such as adipic acid and succinic acid. The polyesters produced from the condensation reactions set forth in Wilson would appear to fall within the formulas set forth by applicant because the reactants used to produce the polymers as well as the conditions used to produce the polymer are the same.

In column 4, lines 5-6, Wilson teaches that the molecular weight can be varied in the polyester produced, resulting in a polymer having three or more polyester units.

Additionally, for claim 21, in column 3, lines 52-66, Wilson teaches that zinc acetate is used as a catalyst. This compound is a Lewis acid. Wilson also teaches that

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a polyfunctional modifier can be added in the production of the polyester. In col. 6, lines 28-29, Wilson teaches that the polyfunctional modifier is dimethylolpropionic acid.

Allowable Subject Matter

7. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 9 is allowed.

Response to Arguments

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. In addition, the allowability of claim 21 has been withdrawn based on the newly discovered Wilson reference.

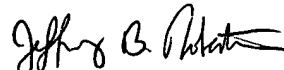
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey B. Robertson
Primary Examiner
Art Unit 1712

JBR